

Amendments to the Claims:

5 Please amend claims 1, 5, 9, 14 and 16 as shown in the following list of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1 1. (currently amended) A communication station adapted for contactless
2 communication with transponders and with further communication stations,
3 comprising:

4 first protocol-executing means configured to function according to station-
5 transponder protocol, the first protocol-executing means being configured to effect
6 communication between the communication station and at least one transponder
7 while observing the station-transponder protocol, the at least one transponder
8 being a passive transponder that does not have any power supply of its own;

9 second protocol-executing means configured to function according to a
10 station-station protocol that differs from the station-transponder protocol in
11 respect of at least one protocol parameter, the second protocol-executing means
12 being configured to effect communication between the communication station and
13 at least one further communication station while observing the station-station
14 protocol;

15 first signal-processing means electrically connected to the first protocol-
16 executing means, the first signal-processing means being configured to code
17 signals using Miller code and decode signals using Manchester code for
18 contactless station-transponder communication, the first signal-processing means
19 being further configured to modulate and demodulate the signals for the
20 contactless station-transponder communication;

21 second signal-processing means electrically connected to the second
22 protocol-executing means, the second signal-processing means being configured
23 to code and decode signals for contactless station-station communication, the
24 second signal-processing means being further configured to modulate and
25 demodulate the signals for the contactless station-station communication, the
26 second signal-processing means being configured to code and decode the signals

27 using one of a non-return-to-zero code and an FM zero code for the contactless
28 station-station communication; and
29 a transmission coil electrically connected to the first signal-processing
30 means to transmit the signals for the contactless station-transponder
31 communication from the first signal-processing mean and to receive the signals
32 for the contactless station-transponder communication to be processed by the first
33 signal-processing mean so that the contactless station-transponder communication
34 is performed inductively between the communication station and the at least one
35 transponder, the transmission coil being also electrically connected to the second
36 signal-processing means to transmit the signals for the contactless station-station
37 communication from the second signal-processing mean and to receive the signals
38 for the contactless station-station communication to be processed by the second
39 signal-processing mean so that the contactless station-station communication is
40 performed inductively between the communication station and the at least one
41 further communication station, the transmission coil being configured to provide
42 an energy-supply signal to the at least one transponder to supply the at least one
43 transponder with energy, wherein the station-transponder protocol and the station-
44 station protocol are selected such that communication processes take place
45 simultaneously between the communication station and the at least one
46 transponder and between the communication station and the at least one further
47 communication station in which there are no mutual influences.

1 2. (previously presented) A communication station as claimed in claim 1,
2 wherein the first protocol-executing means have energy-supply signal generating
3 means that are configured to generate the energy-supply signal each time the
4 handling of the station-transponder protocol starts, and wherein the second
5 protocol-executing means have synchronizing-signal generating means that are
6 configured to generate a synchronizing signal each time the handling of the
7 station/station protocol starts.

1 3. (previously presented) A communication station as claimed in claim 1,
2 wherein the station-station protocol is operative to cause a minimal energy

3 consumption at the communication station when communicating with the at least
4 one further communication station.

1 4. (previously presented) A communication station as claimed in claim 1,
2 wherein the first protocol-executing means are configured to function according to
3 the station-transponder protocol that is configured to communicate with a plurality
4 of transponders, and wherein the second protocol-executing means are configured
5 to establish a communication connection to a plurality of communication stations.

1 5. (currently amended) An integrated circuit for a communication station for
2 contactless communication with transponders and with further communication
3 stations, comprising:

4 first protocol-executing means configured to function according to a
5 station-transponder protocol, the first protocol-executing means being configured
6 to effect communication between the communication station and at least one
7 transponder while observing the station-transponder protocol, the at least one
8 transponder being a passive transponder that does not have any power supply of
9 its own;

10 second protocol-executing means configured to function according to a
11 station-station protocol that differs from the station-transponder protocol in
12 respect of at least one protocol parameter, the second protocol-executing means
13 being configured to effect communication between the communication station and
14 at least one further communication station while observing the station-station
15 protocol;

16 first signal-processing means electrically connected to the first protocol-
17 executing means, the first signal-processing means being configured to code
18 signals using Miller code and decode signals using only Manchester code for
19 contactless station-transponder communication, [[-]]the first signal-processing
20 means being further configured to modulate and demodulate the signals for the
21 contactless station-transponder communication;

22 second signal-processing means electrically connected to the second
23 protocol-executing means, the second signal-processing means being configured
24 to code and decode signals for contactless station-station communication, the

25 second signal-processing means being further configured to modulate and
26 demodulate the signals for the contactless station-station communication, the
27 second signal-processing means being configured to code and decode the signals
28 using one of a non-return-to-zero code and an FM zero code for the contactless
29 station-station communication; and

30 a terminal electrically connected to the first signal-processing means to
31 transmit the signals for the contactless station-transponder communication from
32 the first signal-processing mean to a transmission coil for transmission and to
33 receive the signals for the contactless station-transponder communication from the
34 transmission coil to be processed by the first signal-processing mean so that the
35 contactless station-transponder communication is performed inductively between
36 the communication station and the at least one transponder, the terminal being
37 also electrically connected to the second signal-processing means to transmit the
38 signals for the contactless station-station communication from the second signal-
39 processing mean to the transmission coil for transmission and to receive the
40 signals for the contactless station-station communication from the transmission
41 coil to be processed by the second signal-processing mean so that the contactless
42 station-station communication is performed inductively between the
43 communication station and the at least one further communication station, the
44 transmission coil being configured to provide an energy-supply signal to the at
45 least one transponder to supply the at least one transponder with energy, wherein
46 the station-transponder protocol and the station-station protocol are selected such
47 that communication processes take place simultaneously between the
48 communication station and the at least one transponder and between the
49 communication station and the at least one further communication station in
50 which there are no mutual influences.

1 6. (previously presented) An integrated circuit as claimed in claim 5, wherein
2 the first protocol-executing means have energy-supply signal generating means
3 configured to generate the energy-supply signal each time the station-transponder
4 protocol starts, and wherein the second protocol-executing means have
5 synchronizing-signal generating means that are configured to generate a
6 synchronizing signal each time the handling of the station-station protocol starts.

1 7. (previously presented) An integrated circuit as claimed in claim 5, wherein
2 the station-station protocol is configured to minimize energy consumption at the
3 communication station when communicating with the at least one further
4 communication station.

1 8. (previously presented) An integrated circuit as claimed in claim 5, wherein
2 the first protocol-executing means are operative to function according to the
3 station-transponder protocol, which is adaptive to communicate with a plurality of
4 transponders, and wherein the second protocol-executing means are configured to
5 establish a communication connection to a plurality of communication stations.

1 9. (currently amended) A communication system adapted for contactless
2 communication, comprising:

3 a plurality of transponders, the transponders being passive transponders
4 that do not have any power supply of their own;

5 a plurality of communication stations, each comprising:

6 a microprocessor configured to execute a station-transponder
7 protocol for contactless station-transponder communication with at least one of
8 the transponders and a station-station protocol for contactless station-station
9 communication with at least one of the communication stations, wherein the
10 station-station protocol differs from the station-transponder protocol by at least
11 one protocol parameter, the microprocessor being further configured to code
12 signals using Miller code and decode signals using Manchester code for the
13 contactless station-transponder communication and to code and decode signals for
14 the contactless station-station communication, [[-]]the microprocessor being
15 further configured to modulate and demodulate the signals for the contactless
16 transponder communication and to modulate and demodulate the signals for the
17 contactless station communication, the microprocessor being configured to code
18 and decode the signals using one of a non-return-to-zero code and an FM zero
19 code for the contactless station-station communication; and

20 a transmission coil electrically connected to the microprocessor to
21 transmit and receive the signals for the contactless station-transponder
22 communication and the signals for the contactless station-station communication

23 to and from the microprocessor so that the contactless station-transponder
24 communication is performed inductively between the communication station and
25 the at least one of the transponders and the contactless station-station
26 communication is performed inductively between the communication station and
27 the at least one of the communication stations, the transmission coil being
28 configured to provide an energy-supply signal to the transponders to supply the
29 transponders with energy, wherein the station-transponder protocol and the
30 station-station protocol are selected such that communication processes take place
31 simultaneously between the communication station and the at least one of the
32 transponders and between the communication station and the at least one of the
33 communication stations in which there are no mutual influences.

1 10. (canceled).

1 11. (previously presented) A communication system as claimed in claim 9,
2 wherein each of the transponder is an RF tag.

1 12. (previously presented) A communication system as claimed in claim 9,
2 wherein the microprocessor is configured to generate the energy-supply signal.

1 13. (previously presented) A communication system as claimed in claim 9,
2 wherein the microprocessor is configured to generate a synchronizing signal.

1 14. (currently amended) A communication station adapted to communicate
2 with a plurality of transponders, comprising:
3 a microprocessor configured to execute a station-transponder protocol for
4 contactless station-transponder communication with at least one of the
5 transponders and a station-station protocol for contactless station-station
6 communication with other communication stations, the transponders being passive
7 transponders that do not have any power supply of their own, wherein the station-
8 station protocol differs from the station-transponder protocol by at least one
9 protocol parameter, the microprocessor being further configured to code signals
10 using Miller code and decode signals using Manchester code for the contactless

11 station-transponder communication and to code and decode signals for the
12 contactless station-station communication, the microprocessor being further
13 configured to modulate and demodulate the signals for the contactless station-
14 transponder communication and to modulate and demodulate the signals for the
15 contactless station-station station communication, the microprocessor being
16 configured to code and decode the signals using one of a non-return-to-zero code
17 and an FM zero code for the contactless station-station communication; and
18 a transmission coil electrically connected to the microprocessor to transmit
19 and receive the signals for the contactless station-transponder communication and
20 the signals for the contactless station-station communication to and from the
21 microprocessor so that the contactless station-transponder communication is
22 performed inductively between the communication station and the at least one of
23 the transponder and the contactless station-station communication is performed
24 inductively between the communication station and the other communication
25 stations, the transmission coil being configured to provide an energy-supply signal
26 to the transponders to supply the transponders with energy, wherein the station-
27 transponder protocol and the station-station protocol are selected such that
28 communication processes take place simultaneously between the communication
29 station and the at least one of the transponders and between the communication
30 station and the other communication stations in which there are no mutual
31 influences.

1 15. (previously presented) A communication station as claimed in claim 14,
2 wherein each of the transponders is an RF tag.

1 16. (currently amended) A communication station as claimed in claim 14,
2 wherein the microprocessor is configured to generate the energy-supply signal.

1 17. (previously presented) A communication system as claimed in claim 14,
2 wherein the microprocessor is configured to generate a synchronizing signal.

1 18. (previously presented) A communication station as claimed in claim 1,
2 wherein the second signal-processing means is configured to code and decode the
3 signals using the FM zero code for the contactless station-station communication.

1 19. (previously presented) A communication station as claimed in claim 1,
2 wherein the second signal-processing means is configured to code and decode the
3 signals using the non-return-to-zero code for the contactless station-station
4 communication.

1 20. (canceled).